

Facility Permit No: SLAS-35-09 Bailey's Septic Tank Service Permit to Operate August 5, 2014 Page 1 of 4

# North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

# PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Bailey's Septic Tank Service Leroy Glenn Bailey P.O. Box 925 Knightdale, NC 27545

is hereby permitted to operate Septage Land and Application Site with permit # SLAS-35-09 located on US Hwy 401 in Franklin County. The fields are located in two different places at approximate positions 35.99871° N latitude and -78.37974° E longitude and 35.99234 °N latitude and -78.38178°E longitude. This site is permitted only for operations that are conducted in accordance with the representations made in the approved application, with all conditions attached to this permit, and with all of the provisions of 15A NCAC 13B.0800 -- Septage Management. Failure to operate as permitted may result in the Department suspending or revoking this permit, initiating action to enjoin the unpermitted operation, imposing administrative penalties, or invoking any other remedy as provided in Chapter 130A, Article 1, Part 2 of the North Carolina General Statutes.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued 8 5 2614

Martin A. Gallagher, Branch Head Composting & Land Application Branch

1646 Mail Service Center, Raleigh, North Carolina 27699-1646 Telephone 919-707-8200 \ Internet http://portal.ncdenr.org/web/wm/sw

#### CONDITIONS OF OPERATING PERMIT

- This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards both surface and ground waters.
- 2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Leroy Glenn Bailey and approved by the Division of Waste Management. The 9.5-acre site is established in tall fescue and shall be divided into Field 1A (4.4 acres) and Field 2 (5.1 acres). The mandatory 30-day waiting period between the last application of septage and the harvest of a crop shall be maintained. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.
- 3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Leroy Glenn Bailey in such a manner as to prevent the migration of wastes off of the designated waste receiving site. Any site improvements noted in the plan must be installed within 30 days of plan approval. The installation of groundwater monitoring wells shall be required as deemed necessary by the Division.
- 4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other local, state, and federal government agencies which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the Federal Regulations listed in the Code of Federal Regulations, 40 CFR Part 503.
- 5. This permit may be modified or reissued at any time to incorporate any conditions, limitations and/or monitoring requirements the Division deems necessary to adequately protect the environment and public health.
- 6. This site is only permitted for the land application of domestic septage and grease trap pumpings. Domestic septage pH shall be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application.

- 7. This site contains approximately 9.5 acres that are available for land application of septage. The maximum annual application rate shall be 50,000 gallons per acre per year. At this application rate, a maximum annual volume of 475,000 gallons may be applied to this site. This application rate assumes equal septage distribution, on an annual basis, over the entire permitted area. Application amounts to the fields shall not exceed the maximum annual application rate or the monthly application rates as listed in the approved nutrient management plan for the site.
- 8. An approved above ground septage detention system with a minimum design capacity of 9,134 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.
- Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete.
- 10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.
- 11. Septage shall not be applied during periods of high soil moisture. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.
- 12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.
- 13. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee or an employee of the firm named in this permit shall discharge septage at this site without prior appropriate notification and written approval from the Division.

- 14. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure. This permit is non-transferable.
- 15. This permit shall expire on August 1, 2015. Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838 (e)(1) of the NC Septage Management Rules and the Code of Federal Regulations, 40 CFR Part 503.17 (b).
- 16. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division upon request.
- 17. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.
- 18. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site. Boundaries of the permitted septage land application fields shall be clearly marked on the ground. Field 1A requires a 100 feet setback from the nearby disposal field permitted to a different operator and a 25 feet setback from the drainage swale. Also, a 5 feet setback along the woodline and around the two rock outcroppings is required on Field 1A.
- 19. The areas that can be used for land application of septage shall be maintained to meet the minimum setback distances as described in NC Septage Management Rule 15A NCAC 13B .0837(d) such as 500 feet from any existing wells, residences, places of business, or places of public assembly. Also, septage shall not be disposed of within 50 feet of any property line, within 100 feet of any ditch or within 200 feet of any surface water unless specified otherwise. A 50 feet setback shall be maintained between the disposal fields and any neighboring crop which shall be used for human consumption.



## North Carolina Department of Environment and Natural Resources

Pat McCrory Governor

August 5, 2014

John E. Skvarla, III Secretary

Mr. Leroy Glenn Bailey Bailey's Septic Tank Service P.O. Box 925 Knightdale, NC 27545

RE:

SLAS permit issuance

**Bailey's Septic Tank Service** 

SLAS-35-09

**US Hwy 401 in Franklin County** 

Dear Mr. Bailey:

The NC Division of Waste Management has reviewed your application to for a Septage Land Application Site permit in Franklin County. Your application has been approved and your permit, # SLAS-35-09, is enclosed. If you have any questions about your permit, we'll need the number in order to answer your questions.

Please read all of your permit conditions carefully. Your nutrient management and soil erosion and runoff control plans have been included in your permit's conditions. In particular, review Permit Condition 15, which states that you will need to submit septage application logs for your site in order to renew your permit. These logs need to cover the entire time your current permit is valid. For details on the information you should include, consult the NC Septage Management Rule 15A NCAC 13B .0838(e)(1) and the Federal register's 40CFR Part 503.17(b). This permit condition also states that this permit is valid until **August 1, 2015.** If you have any questions, please ask for assistance as rule violations could expose you to administrative penalties.

Please note that to land apply industrial or commercial septage at a permitted septage disposal site you must have **prior approval** from the NC Division of Waste Management. The waste must be sampled prior to being removed from the system. Generally, the Division will request that you have a waste analysis run on septage from each commercial or industrial septage generator before that type of septage is approved for land application.

Use of a land application site or septage detention or treatment facility that is not permitted may result in administrative penalties up to \$15,000 per violation in accordance with NC General Statute 130A-22.

If you have any questions, please contact me at (910) 433-3352 or Martin Gallagher at (919) 707-8280.

Sincerely,

Connie S. Wylie, Soil Scientist

Division of Waste Management, NCDENR

**Enclosures** 

cc: Char

Charles Strickland, landowner Franklin County Health Department

h:cla\septage\slasper\3509cl14p.doc

# APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources Division of Waste Management – Solid Waste Section 1646 Mail Service Center, Raleigh, NC 27699-1646

| •  | Site and Operator In<br>1. Applicant<br>Address                  |  | seuse Harber Dr  |
|----|--|--|--|
|    | Phone  | 919-266-1161   | 7.2  |
| 2  | <ol> <li>Contact person for Title or position Address</li> </ol> | 108 Neuse Horbor Dr<br>Knightdale NC 27545   | one <u>919-819 -8940</u>   |
| ;  | 3. Landowner<br>Address  | 4910 US 401 Huy So<br>Youngsville NC 27596   | euth   |
| 4  | Directions to site:  | County Franklin State Road  540 take 401 toward  irboro Rol Ya mile on   | Number 401<br>hoursburg  |
| 5  | i. Indicate whether re   | equest is: new renewal   | modification   |
|    |  | val or modification, provide the following inform<br>t number: permit expir  |  |
| 6  | . Number of acres m  | neeting the requirements of the N.C. Septage   | Management Rules: 10.8 acres   |
| 7. | Substances other to (a) None dates of discharge.                 | han septage or grease trap pumpings previou<br>, or (b) Attach a list indicating other substanc  | usly disposed of on the site:<br>es, the amounts discharged, and the |
| 8. | landowner (if the pe   | rized landowner authorization to operate a sermit applicant does not own the property). If wner authorization form. If limited liability mpany landowner authorization form. | a corporation owns the land use                                      |
| 9. | Attach site evaluation the Division prepare                      | on report, including aerial photograph and soi<br>ed the report.   | analysis with metals results, unless                                 |
| 10 | . Attach a vicinity ma   | ap (county road map showing site location).  | RECEIVED   |
| ٥V | ver)   |  | MAY 1 9 2014   |
|    |  |  | DIVISION OF WASTE MANAGEMENT   |

FAYETTEVILLE REGIONAL OFFICE

|      | T         | he following information shall be included with the application form:  |
|------|-----------|--|
|      |           | . Nutrient Management Plan<br>. Soil Erosion and Runoff Control Plan   |
|      | 3         | Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): NRWWTP - (Authorization Form Atlactiect)  — permitted storage tank (IN 7-17-14   |
|      | 4.        | Types of septage proposed to be discharged at the site (check all that apply):  (a) Domestic septage pumped from septic tanks  (b) Grease trap pumpings  (c) Portable toilet waste  (d) Commercial / Industrial septage  |
|      | 5.        | Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary): Domestic septage -enough hydrated limeshell be added to waste to raise phiz or higher-remain 1/2 hour prior to land application  Grease Shall remain 12 ph or higher two hours prior  |
|      | 6.        | Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): Across the field with a mount of truck spreader attachesar of 1971  |
|      | <b>7.</b> | Demonstration from the appropriate state or federal government agency that the land application site complies with the Endangered Species Law ** or if any part of the site specified is not agricultural land (use additional paper to explain if necessary):  SHOOD  |
| III. | Ce        | ertification   |
|      | l h       | <ol> <li>The information provided on this application is true, complete, and correct to the best of my knowledge.</li> <li>I have read and understand the N.C. Septage Management Rules, and</li> <li>I am aware of the potential consequences, including penalties and permit revocation, for failing to follow all applicable rules and the conditions of a Septage Land Application Site permit.</li> </ol> |
|      |           | Lercy Glenn Bouley Sr Vice-President   |
|      |           | Drint name Title   |

II. Site Management Information:

Limited Liability Company Landowner=s Authorization to Operate a Septage Land Application Site
North Carolina Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
1646 Mail Service Center, Raleigh, NC 27699-1646

| I hereby certify that the undersigned limited liability company, Alandale Investment Group LL   |
|---|
| 264 acres of land located 4910 US Yor Hay, South, Youngsuille, NC 2796 southern Franklin County and identified by   |
| NC 27596 southern Franklin County and identified by   |
| F 6900 - 003 (book and page of recorded deed or tax map parcel) and   |
| that the limited liability company agrees to allow be ley's Systic Tank Servic (operator name) to use said land for application of septage for a period of 2 years (indicate time period) |
| use said land for application of septage for a period of (indicate time period)   |
| beginning $400$ , $20/3$ (give date), and that on behalf of the limited liability company, I have read  |
| the North Carolina Septage Management Rules*, and Alandale Inverse ext Croy LL Chame of   |
| limited liability company) understands and agrees to maintain the restrictions on land use after septage  |
| application ends**. Alandale Investment Group ( that Ge of limited liability company) further   |
| understands that no septage may be land applied until the Division of Waste Management has issued a   |
| permit for a septage land application site. The above described property is owned solely by the   |
| undersigned limited liability company, or jointly with (name all co-owners, or state none)  |
| None  |
| Date: 7-30-/3   |
|   |
| Handale Investment Group LCC Limited Liability Company (Print Name)   |
| Limited Liability Company (Print Name)  |
| Clarks E Stribler Ch PRI 155 E, ST177 CKLAND OWNER Signature (Authorized Member or Manager) Print Name and Title  |
| 사이트 그렇게 하는 사람이 가게 되는 것이 하는 말을 다 하는 것이 되었다. 그는 이번 모든 이렇게 되었다.  |
| North Carolina  |
| Franklin County   |
| I, De n'es total, a Notary Public for said County and State do hereby certify that  |
| Charles E, Strickland (name of authorized member or manager of limited liability company)   |
| personally appeared before me this day and, being first duly sworn, acknowledged that he (she) is a (the)   |
| owner (member or manager) of Alandal Investment, a limited liability  |
| company, and that by authority duly given and as the act of the limited liability company, the foregoing  |
| instrument was signed in its name by its authorized boner (member or manager), and that the   |
| statements contained therein are true. Witness my hand and official seal, this the 29th day of  |
| July 2013.  |
| J. J. J.  |
| Notary Public NOTARY PUBLIC   |
|   |
| My Commission Expires May 13 2018   |
| (Consequences)  |
|   |

\*15A N.C. Admin. Code 13B Section .0800

\*\* As required by Rule .0826





Nutrient Management Plan for Septage Application WASTE MANAGEMENT

#### Prepared for:

Bailey's Septic Tank Service PO Box 925 Knightdale, NC 27545 (919) 266-1161

Site Operator:

Prepared by:

Chris Mosley Agri-Waste Technology, Inc. 501 N. Salem St., Suite 203 Apex, NC 27502

(919) 367-6311

Plan Preparer:

Date: 5/12/14

Date: 5/14/14

#### A. General Information

- 1. The septage application site is located on the Charles Strickland Farm in Franklin County, NC on the west side of US Highway 401 approximately 1 mile north of Harris Crossroads.
- 2. Field #1A is 5.2 total acres (5.1 spreadable acres). The dominant soil series is Wedowee (WaB). See attached maps.
- 3. Field #2 is 5.6 total acres (5.5 spreadable acres). The dominant soil series is Vance (VaB). See attached maps.
- 4. Septage will not be applied when the soil will allow a loaded truck to leave a depression in the sod deeper than 3 inches.
- 5. Septage shall be sampled so that the waste can be analyzed at least once per year.
- 6. Septage storage shall be provided to account for the average volume of septage pumped per week, or an alternative plan such as disposal at a waste treatment plant should be in place.

#### B. Crops

- 1. Field #1A and Field #2 shall be maintained in tall fescue harvested for hay.
- 2. Bare spots shall be reseeded at a rate of 20 bushels/acre.

#### C. Nutrient Needs for Fescue

Table 1 summarizes the realistic yield expectation and nutrient needs of fescue hay in Franklin County grown on a Wedowee soil (Field 1a) and a Vance soil (Field 2).

Table 1. Yield and Nutrient Needs

| Field | RYE <sup>1</sup> | N App. Rate | PAN <sup>2</sup> Target | P2O5 Uptake |
|-------|------------------|-------------|-------------------------|-------------|
| rieid | Ton/ac           | lb N/ac/ton | lb PAN/ac               | lb P2O5/ac  |
| 1a    | 2.9              | 44.4        | 129                     | 46          |
| 2     | 4.4              | 44.4        | 194                     | 69          |

<sup>&</sup>lt;sup>1</sup> RYE = Realistic Yield Expectation based on county, crop and field slope.

#### D. Monthly Application Rate Limits

Fescue hay grows year round in North Carolina but nutrient needs vary seasonally based on the crop growth curve. Applications shall be limited to no more than 50,000 gal/ac according to the permit. Applying at 50,000 gal/ac/year will not exceed the nitrogen needs of the fescue based on the waste sample report provided (attached). The septage contains 443.29 ppm of Total Nitrogen, approximately half of which is plant available. Converting ppm to lb/1000 gallons results in a plant available nitrogen content of approximately 1.85 lb/1000gal or 92.5 lb N/50,000 gallons. Monthly applications should be limited to the amounts shown in Table 2.

Table 2. Monthly Septage Application Limits

| Low = 4,500 gallons   |
|-----------------------|
| MED = 9,000 gallows   |
| High = 15,000 gallows |
| (C) 1711.             |

| Month     | Rate (gal/ac) |
|-----------|---------------|
| January   | 4,500         |
| February  | 4,500         |
| March     | 9,000         |
| April     | 15,000        |
| May       | 15,000        |
| June      | 4,500         |
| July      | 4,500         |
| August    | 9,000         |
| September | 9,000         |
| October   | 9,000         |
| November  | 4,500         |
| December  | 4,500         |

Convlative application rate is not to exceed the permitted application rate

#### E. Application Method

Septage shall be broadcast using a spreader truck as evenly as practical on each field respectively.

<sup>&</sup>lt;sup>2</sup> PAN = plant available nitrogen

#### F. Additional Fertility Requirements

Based on the most recent soil tests (attached) and the fact that septage will be applied to fields 1a and 2, no additional commercial P or K will be needed to grow a crop that will achieve the realistic yield expectation. Additionally, no lime is needed. Supplemental commercial Nitrogen may be needed to achieve the realistic yield expectation.

#### G. Crop Harvest

- 1. The fescue will be cut as hay and baled whenever it reaches approximately 12 inches in height, or roughly every 4 to 5 weeks beginning in May. 2-3 harvests per year are expected.
- 2. A 30 day waiting period must be observed between application of septage and harvest. Septage applications and harvests on fields 1a and 2 will need to be coordinated carefully to abide by this requirement. During the harvesting season, the fields will need to be cycled between receiving septage applications and being rested for harvest.
- 3. An example of the septage application rotation follows:

| Date           | Field 1a | Field 2 |
|----------------|----------|---------|
| January 1-31   | Apply    | Apply   |
| February 1-29  | Apply    | Apply   |
| March 1-31     | Apply    | Apply   |
| April 1-30     | Apply    | Rest    |
| May 1          | Rest     | Harvest |
| May 2-31       | Rest     | Apply   |
| June 1         | Harvest  | Rest    |
| June 2-30      | Apply    | Rest    |
| July 1         | Apply    | Harvest |
| July 2-31      | Rest     | Apply   |
| August 1       | Harvest  | Apply   |
| August 2-31    | Apply    | Rest    |
| September 1    | Rest     | Harvest |
| September 2-30 | Rest -   | Apply   |
| October 1      | Harvest  | Apply   |
| October 1-31   | Apply    | Apply   |
| November       | Apply    | Apply . |
| December       | Apply    | Apply   |

4. The hay bales will be sold to local farmers as feed for cattle and horses.

Fry alm Bail

### SOIL EROSION AND RUNOFF CONTROL PLAN

In areas where the slopes do not exceed 12 percent, a 50 foot buffer, planted in fescue, should suffice to prevent septage waste from migrating off of the fields. Any bare spots or areas where the existing vegetation may have been chemically or physically burned shall be tilled and reseeded with fescue or a fescue and annual rye grass mixture. This reseeding may be done in the Spring or Fall at normal customary reseeding rates. Since the site has existing established vegetation to stabilize the soil, no terraces, sediment basins or other BMP's will be required other than to maintain vegetative buffers.

for the Bould

7-17-19 Date

Field 1 35.99871° N latitud -78.37974° E longitude SLAS-35-09 Field 2 35.99234° N latitude -78.38178° E longitude

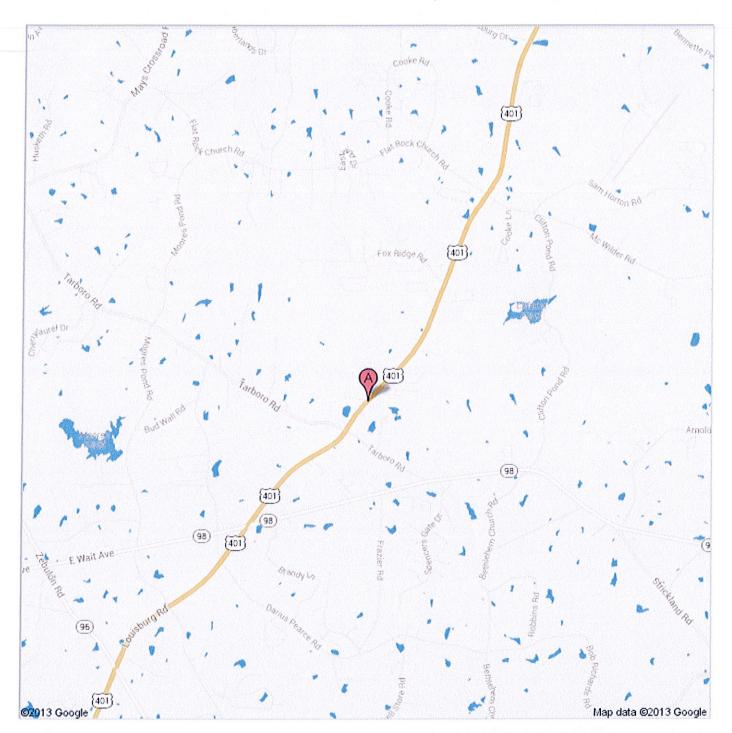


Source: Aerial imagery obtained from Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. Site boundary from NC DENR Division of Waste Management.



#### Address 4910 U.S. 401 Youngsville, NC 27596







DIVISION OF WASTE MANAGEMENT FAYETTEVILLE REGIONAL OFFICE